UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,310	06/27/2003	Nishit Kumar	3551P052	8936

8791 7590 04/26/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030	**EXAMINER** PHAN, TRI H

ART UNIT	PAPER NUMBER
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 June 2003</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10, 12-27 and 29-33</u> is/are rejected.

7)☒ Claim(s) <u>11 and 28</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 June 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Communication(s)

1.   This Office Action is in response to the communication filed on June 27th, 2003. Claims

1-33 are now pending in the application.

Drawings

2.   The drawings are objected to because all blocks in Figures 6A-B should be labeled with

descriptive legends based on 37 C.F.R. § 1.84(o) for supporting the objection in the Rules and

M.P.E.P. A proposed drawing correction or corrected drawings are required in reply to the Office

action to avoid abandonment of the application. The objection to the drawings will not be held in

abeyance.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
patent by another filed in the United States before the invention by the applicant for patent, except that an
international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
subsection of an application filed in the United States only if the international application designated the United
States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-3, 5-8, 10, 12-14, 16-17, 19-20, 22-25, 27, 29-31 and 33 are rejected under 35

U.S.C. 102(e) as being anticipated by **Strasser et al.** (U.S.2003/0185238; hereinafter refer as

'**Strasser**').

- In regard to claims 1 and 19, **Strasser** discloses the *method and system* (for example see

figs. 1 and 6), *which comprise*

a storage medium ('storage 160' in fig. 1);

a transport processor ('CPU 107' in fig. 1) *coupled to the storage medium, the transport*

processor operable to time-stamp each of a plurality of packets received and to store one or

more of the time-stamped packets on the storage medium (for example see figs. 1-2; page 2, para

[0017]; page 3, paras [0022-0023]); *and*

a playback device coupled to the storage medium ('CPU 305' and 'storage 310' in

playback system of fig. 3), *the playback device operable to read back the stored packets from the*

storage medium and to reconstruct at playback time a partial transport stream ('time-stamped

SPTS 145' in fig. 3) *with the packets read back and the timestamps of the packets read back* (for

example see figs. 2-4; page 3, paras [0025], [0027-0029]).

- Regarding claims 2 and 22, **Strasser** further discloses, *wherein the transport processor*

comprises a filter ('TS parser 110' in fig. 1) *to turn an incoming full transport stream* ('multiple

program transport stream SPTS 105' in fig. 1) *into a partial transport stream* ('single program

transport stream 115' in fig. 1), *the partial transport stream includes the one or more of the*

plurality of packets (for example see page 2, para [0017]; page 3, paras [0024-0025]).

- In regard to claims 3 and 20, **Strasser** further discloses, *wherein the storage medium is an external memory* ('storage 160' in fig. 1).

- Regarding claims 5-6 and 23, **Strasser** further discloses, *a system time clock 'STC' counter to record the time when each of the plurality of packets is received* ('stc'; for example see page 1, para [0003]; pages 2-3, para [0021]).

- In regard to claims 7 and 24, **Strasser** discloses the *method and system* (for example see figs. 3 and 7), *which comprise*

    a storage medium ('storage 310' in fig. 3); *and*

    a playback device coupled to the storage medium ('playback system' and 'storage 310' in fig. 3; for example see page 3, para [0028]; page 5, para [0050]), *the playback device including*

        an interface ('TP parser 320 interface' in fig. 3) *to read a plurality of chunks of a partial transport stream* ('time-stamped SPTS 145' in fig. 3) *from the storage medium, each of the plurality of chunks including a lead packet* ('program clock reference PCR'; for example see page 5, paras [0043], [0048]),

        a parser ('TP parser 320' in fig. 3) *to parse the lead packet to extract the temporal information* ('time-stamped SPTP') *of the partial transport stream* (for example see page 3, para [0029]), *and*

        a processing logic module ('parse module 530' in fig. 5) *to reconstruct the partial transport stream with the temporal information and the plurality of chunks* (for example see

pages 4-5; para [0040]; wherein stored timestamp value is compared against current timestamp

in construct the SPTS as disclosed in page 4, para [0038]; page 5, para [0047]).

- Regarding claims 8 and 25, **Strasser** further discloses, *wherein the storage medium is*

an external memory ('storage 310' in fig. 3).

- In regard to claims 10 and 27, **Strasser** further discloses, *wherein the lead packet is a*

program clock reference 'PCR' packet (for example see page 5, paras [0042-0043], [0048];

wherein the parsed transport packet of SPTS, e.g. *"lead packet"*, includes program clock

reference 'PCR', which uses for synchronizing with the STC).

- Regarding claims 13 and 30, **Strasser** discloses the *method and system* (for example see

figs. 1-4 and 6-7), *which comprise*

a *storage medium* ('storage 160' in fig. 1; 'storage 310' in fig. 3);

a *playback device coupled to the memory* ('playback system' and 'storage 310' in fig. 3;

for example see page 3, para [0028]; page 5, para [0050]);

a *processor* ('CPU 305' in fig. 3) *coupled to the storage medium operable to receive a*

signal and to dynamically select a first mode ('live broadcast playback'; for example see pages

3-4, para [0031]) *or a second mode* ('stored playback mode'; for example see page 4, para

[0032]) *in response to the signal,*

wherein the first mode ('live broadcast playback') *comprises*

time-stamping each of a plurality of packets (for example see page 2, para [0017],

[0021]),

storing a subset of the time-stamped packets on the storage medium (for example

see figs. 1-2; page 2, para [0017]; page 3, paras [0022-0023]),

reading at playback time the stored packets from the storage medium (for

example see page 3, para [0028]), *and*

reconstructing a first partial transport stream ('time-stamped SPTS 145' in fig.

3) *with the packets read* (for example see figs. 2-4; page 3, paras [0025], [0027-0029]); *and*

wherein the second mode ('stored playback mode') *comprises*

reading a plurality of chunks of a second partial transport stream ('time-stamped

SPTS 145' in fig. 3) *from the storage medium, each of the plurality of chunks including a lead*

packet ('program clock reference PCR'; for example see page 5, paras [0043], [0048]),

parsing a lead packet of each of the plurality of chunks to extract the temporal

information ('time-stamped SPTP') *of the lead packet in the second partial transport stream* (for

example see page 3, para [0029]), *and*

reconstructing the second partial transport stream with the temporal information

of the lead packets and the plurality of chunks (for example see pages 4-5; para [0040]; wherein

stored timestamp value is compared against current timestamp in construct the SPTS as disclosed

in page 4, para [0038]; page 5, para [0047]).

- In regard to claim 16, **Strasser** discloses the *method* (for example see figs. 6-7), *which*

comprise

receiving an annotated partial transport stream ('single program transport packet SPTS')

from an external source (for example see step 630 in fig. 6; for example see page 3, para

[0024]);

storing a plurality of time-stamped packets from the partial transport stream on a storage

medium (for example see steps 640-650 in fig. 6; page 2, para [0017]);

reading back at playback time the stored time-stamped packets ('time-stamped SPTS*

145' in fig. 3) *from the storage medium* (for example see steps 710 and 730 in fig. 7; page 3, para

[0027]; page 4, para [0035]); *and*

reconstructing the partial transport stream using the plurality of time-stamped packets,

the plurality of time-stamped packets being arranged in response to their timestamps (for

example see page 3, para [0028-0029]; page 5, para [0045]).

- Regarding claims 12 and 29, **Strasser** further discloses the *release time of the temporal*

information ('current time representation'; for example see pages 2-3, para [0021]; page 5, para

[0047]).

- In regard to claims 14, 17, 31 and 33, **Strasser** further discloses, *wherein the storage*

medium is an external memory or hard disk ('storage 160' in fig. 1; 'storage 310' in fig. 3).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 4, 9, 15, 18, 21, 26 and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Strasser et al.** (U.S.2003/0185238) in view of **Demas et al.**

(U.S.2003/0165196; hereinafter refer as '**Demas**').

- In regard to claims 4, 9, 15, 18, 21, 26 and 32, **Strasser** discloses all the subject matter

of the claimed invention as discussed in part 4 above of this office action, including the use of

memory storage 160 in fig. 1 or memory storage 310 in fig. 3 for storing SPTPs and related

timestamps as disclosed page 3, para [0022], [0029]; but fails to explicitly disclose "*chunk*

length" and "" in the temporal info. However, such implementation is known in the art.

For example, **Demas** discloses the method and system for managing time-based for

MPEG decoding in personal video recorder system (for example see Abstract, fig. 1); which use

DDR-SDRAM, e.g. "*double data rate memory 'DDR'*", as storage unit for storing records (for

example see page 3-4; para [0033]3).

Thus it would have been obvious to the person of ordinary skill in the art at the time of

the invention was made to implement the use of DDR memory as storage as taught by **Demas** in

the **Strasser**'s storage, with the motivation being to quickly locate particular picture frames

during playback and recording in timing issue as disclosed in page 1, para [0004].

Allowable Subject Matter

7.   Claims 11 and 28 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Keesen et al. (U.S.7,006,756), **Rijckaert et al.** (U.S.6,801,544) and **Naimpally,**

Saiprasad V. (U.S.5,619,337) are all cited to show devices and methods for improving MPEG

transport recording system in telecommunication architectures, which are considered pertinent to

the claimed invention.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The

examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tri H. Phan
April 22, 2007

CHI PHAM
SUPERVISORY PATENT EXAMINER